

Docket No. PA742A1C1

Serial No. 10/713,758

REMARKS

Claims 1 – 31 were presented for examination. In the Office Action dated December 15, 2004, the Examiner presented a Detailed Action on the results of the examination as follows:

1. The Specification was objected to because the patent numbers of the related published applications are mission on page 1. The Applicants have corrected this informality.
2. Claims 28 – 31 were objected to because of incorrect claim dependencies. The Applicants have corrected these claims so that the intended parent claim is Claim 27.
3. Claims 1 and 17 were rejected to under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1 and 3 of U.S Patent No. 6,691,084. The Applicants have submitted a terminal disclaimer complying with 37 CFR 3.73(b) to obviate this rejection.
4. Claims 1 and 17 were rejected under 35 U.S.C. 102(b) as being anticipated by Cellario (U.S. Patent No. 5,548,680). The Applicants respectfully traverse this rejection as detailed in the ARGUMENTS AND AMENDMENTS section below.
5. Claims 2 and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cellario, in view of Weaver, et al. (U.S. Patent No. 5,956,673). The Applicants respectfully traverse this rejection as detailed in the ARGUMENTS AND AMENDMENTS section below.
6. Claims 3 – 4 and 19 – 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cellario, in view of DeJaco (U.S. Patent No. 5,911,128). The Applicants respectfully traverse this rejection as detailed in the ARGUMENTS AND AMENDMENTS section below.
7. Claims 5 and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cellario, in view of DeJaco, further in view of Weaver, and further in view of De Martin (IEEE Conference on Acousics, PSeech and Signal Processing , May 1996). The Applicants respectfully traverse this rejection as detailed in the ARGUMENTS AND AMENDMENTS section below.
8. Claims 6 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cellario, in view of DeJaco, further in view of Massaloux (U.S. Patent No. 5,812,965). The Applicants respectfully traverse this rejection as detailed in the ARGUMENTS AND AMENDMENTS section below.

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9. Claims 7 – 8 and 24 – 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cellario, in view of Iijima, et al. (U.S. Patent No. 5, 909,663). The Applicants respectfully traverse this rejection as detailed in the ARGUMENTS AND AMENDMENTS section below.

10. Claims 9 and 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cellario, in view of Iijima, and further in view of Atal (U.S. Patent No. 4,764,963). The Applicants respectfully traverse this rejection as detailed in the ARGUMENTS AND AMENDMENTS section below.

11. Claims 10 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cellario, in view of Swaminathan, et al. (U.S. Patent No. 5,734,789). The Applicants respectfully traverse this rejection as detailed in the ARGUMENTS AND AMENDMENTS section below.

12. Claims 12 – 16 and 27 – 31 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cellario, in view of Swaminathan, further in view of DeJaco, and further in view of Massaloux. The Applicants respectfully traverse this rejection as detailed in the ARGUMENTS AND AMENDMENTS section below.

ARGUMENTS AND AMENDMENTS

As to the underlying base claims 1 and 17, the Examiner states that every feature of these two claims are taught by Cellario. The Applicants respectfully submit that Cellario teaches selecting different coding ways according to the characteristics of the speech segment. However, the “coding ways” of Cellario differ from the “coding modes” taught by the instant invention. Cellario teaches a single coder CV (see Fig. 1) wherein “The precise structure of units CV is of no interest for the invention.” (Cellario, Col. 3, lines 37 – 38.) Cellario is directed to using coding of different speech segments using the different tools of one coding mode: linear predictive coding. The short term analysis and long term analysis modes taught by Cellario are LPC analysis tools.

In contrast, the instant invention is directed to using multiple encoders together in one vocoding system. All of these multiple encoders have been known and used in the art as stand-alone encoders (for example, some previous variable rate vocoders have been based entirely on code-excited linear prediction (CELP)). Other people of skill in the art have been concentrating on making improvements *within* individual encoders, such as CELP coders, NELP coders, and PPP coders, but not improvements using multiple encoders working together.

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There is no teaching by Cellario as to using different encoders within one system, one device. In order to more clearly distinguish this characteristic from Cellario, the Applicants have amended the claims to read "encoder mode" rather than "coding mode" in addition to the language "a plurality of parallel encoder modes" to show the internal structure of the system.

The Applicants respectfully submit that none of the art cited by the Examiner teach nor suggest a plurality of parallel encoder modes (or alternatively, parallel encoding means). Hence, the Applicants respectfully submit that none of the cited art anticipate the instant claims nor render the instant claims unpatentable.


CONCLUSION

In view of the foregoing, the Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application is earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Applicants therefore respectfully request that a timely Notice of Allowance be issued in this case.

Dated: June 15, 2005

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